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10/531643

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INVESTOR IN PEOPLE

The Patent Office  
Concept House  
Cardiff Road  
Newport  
South Wales

NP10 8QQ
REC'D 02 DEC 2003
WIPO PCT

I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

I also certify that the attached copy of the request for grant of a Patent (Form 1/77) bears an amendment, effected by this office, following a request by the applicant and agreed to by the Comptroller-General.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

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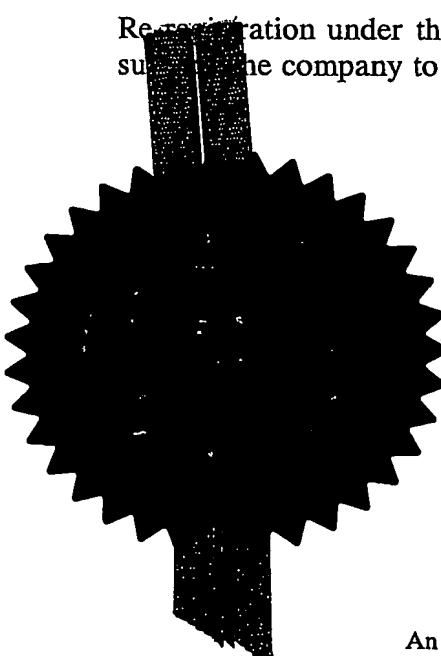
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Signed *le Behan*

Dated 18 November 2003



THE PATENT OFFICE

16 OCT 2002



1/77

# Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

The Patent Office

Cardiff Road  
Newport  
South Wales  
NP10 8QQ

16 OCT 2002

1. Your reference

00/100

2. Patent application number

(The Patent Office will fill in this part)

0224052.1

3. Full name, address and postcode of the or of each applicant (underline all surnames)

BRIAN HARTLEY  
12, OAKLEY AVE.  
BROCKWELL  
CHESTERFIELD  
S40 4DS

Patents ADP number (if you know it)

If the applicant is a corporate body, give the country/state of its incorporation

3725627 002

4. Title of the invention

PAINT SPRAYING DEVICE

5. Name of your agent (if you have one)

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

AS ABOVE

SWINDELL & PARSON  
118 FRIAR GATE  
DERBY  
DE1 1SY

Patents ADP number (if you know it)

00001578001

18

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number

Country

Priority application number  
(if you know it)

Date of filing  
(day / month / year)

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application

Date of filing  
(day / month / year)

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:

- a) any applicant named in part 3 is not an inventor, or
  - b) there is an inventor who is not named as an applicant, or
  - c) any named applicant is a corporate body.
- See note (d))

**Patents Form 1/77**

9. Enter the number of sheets for any of the following items you are filing with this form. Do not count copies of the same document

Continuation sheets of this form

Description

3

Claim(s)

Abstract

Drawing(s)

1 PAGE OF 3 DRAWINGS + 1

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77)

Request for substantive examination

(Patents Form 10/77)

Any other documents

(please specify)

11.

I/We request the grant of a patent on the basis of this application.

Signature

B. Hartley

Date 15/10/02

12. Name and daytime telephone number of person to contact in the United Kingdom

01246-550047

**Warning**

*After an application for a patent has been filed, the Comptroller of the Patent Office will consider whether publication or communication of the invention should be prohibited or restricted under Section 22 of the Patents Act 1977. You will be informed if it is necessary to prohibit or restrict your invention in this way. Furthermore, if you live in the United Kingdom, Section 23 of the Patents Act 1977 stops you from applying for a patent abroad without first getting written permission from the Patent Office unless an application has been filed at least 6 weeks beforehand in the United Kingdom for a patent for the same invention and either no direction prohibiting publication or communication has been given, or any such direction has been revoked.*

**Notes**

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- Write your answers in capital letters using black ink or you may type them.
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- If you have answered 'Yes' Patents Form 7/77 will need to be filed.
- Once you have filled in the form you must remember to sign and date it.
- For details of the fee and ways to pay please contact the Patent Office.

## PAINT SPRAYING DEVICE

This invention relates to paint spraying devices which are hand held.

One problem associated with paint spray devices is the frequent need to clean them after use and also that they can require frequent topping up with paint. They can also be a strain on the hand particularly when a paint dispenser is full and attached to the spray gun head.

There are at present spraying devices which are hand held and attached by a tube to a separate canister. There are also spray guns with canisters attached; these can also be expensive.

The following invention seeks to provide a method whereby the operator of such products can have a cheap alternative and the versatility provided by a device which is also easy to clean.

The main driving force of the device is provided by an electrically operated vibrator which can use the mains electrical supply or a battery.

The section containing the vibrator has no handle and this allows it to be fitted to the top of a tin containing a suitably diluted liquid which will pass easily through a spray jet head, for example fence protective liquid. This reduces the necessity to keep frequently filling a separate container which is usually attached to such spray guns. It also reduces the need to have to clean containers after use.

To enable the vibrator mechanism to be fitted to the top of a tin containing paint, a hole has to be made in the lid; this is done by the use of a specially shaped spike which can be hammered or pushed into it. The bottom of the vibrator mechanism has a threaded section which is placed through the hole and a collar is then screwed onto this when the lid has been removed. A rubber washer is used between the threaded section and the collar to stop any leakage of paint. The section which is threaded has a piece shaped in the centre to allow a tube with filter on the bottom to be pushed into it. Also a hole is provided to allow air to enter the tin when the liquid is sucked out of it. Several tubes varying in length with detachable filters can be provided to reach to the bottom of tins that vary in depth, or a flexible tube could be used.

A small bore tube is connected to the output side of the spray device with a handle equipped with a jet attached to the other end. The tube and handle can be made cheap enough to throw away after use, and even the piston mechanism can be made cheap enough to throw away to alleviate the need for cleaning.

Should the need arise for a small quantity of paint to be thinned, this can still be used in a separate container which has a handle attached to it, unlike most spray guns, which have the handle attached to the vibrator section. To operate the vibrator when it is connected to the mains or batter voltage supply, a switch is suitably positioned on the side of the body containing it. The switch is situated so that it can be suitably operated because the separate container's handle lines up with it. This is possible because the section housing the vibrator mechanism has a section either side of it that protrudes and has holes through them. These line up with sections that protrude on the separate container; two screws are used to secure them together and a rubber seal is fitted between to stop any liquid which may be in the container from leaking out.

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Embodiments of the present invention will now be described by way of example only, with reference to the accompanying drawings in which:

Fig 1 This is a side view of the section containing the vibrator mechanism fitted to a tin of fence paint.

Fig 2 This shows the tool ready to pierce the tin of liquid.

Fig 3 This is a side view of the separate paint container vessel.

#### **Referring to Fig 1**

A shaped section 1, of material which contains a vibrator and a pump mechanism is attached to a tin of paint 2, using a collar 3, which is threaded onto a section of the shaped section 1, which has been passed through a hole in the lid 4, and is also threaded to accept it. A tube 20, attached to it, with a filter 21, on the end, and this passes down into the bottom of the liquid in the tin 2.

#### **Referring to Fig 2**

This shows a tool 5, with a spike on the end 6, this is either hammered or pressed into the lid 7, of the tin of paint 2, to create a hole for the threads on the shaped section 1, Fig 1, to fit through and then be held in position by the collar 3, Fig 1. the tool 5, has a section 8 which protrudes around its circumference to prevent it being driven too deep into the lid, 7.

Attached to one end of the shaped section 1, fig 1, is a flexible tube 9, the other end of the tube is fitted to a handle which is hollow to allow the liquid to pass up it to a jet 11, which is screwed onto the end. The liquid from the tin of pain 2, can then pass from the tin when the vibrator has been connected to the electric supply, it will then spray 12, out of the jet 11.

To connect the vibrator to the mains electrical supply a cable with a suitable plug head 14, is used. the switch 22, Fig 1 is used to switch the electrical supply on or off.

### **Referring to Fig 3**

This shows a separate container 15, for use when paint has to be thinned before use. The shaped section 1, Fig 1, has flanges 16, which protrude either side with holes through them. When the separate section 1, is placed on the top of the separate container 15, these line up with flanges 17, which has holes in them and are threaded. Two screws 18, are used to secure them together, a rubber washer 19, stops any leakage.

Whilst endeavouring in the foregoing specification to draw attention to those features of the invention believed to be of particular importance, it should be understood that the Applicant claims protection in respect of any patentable feature or combination of features hereinbefore referred to and/or shown in the drawings, whether of not particular emphasis has been placed thereon.

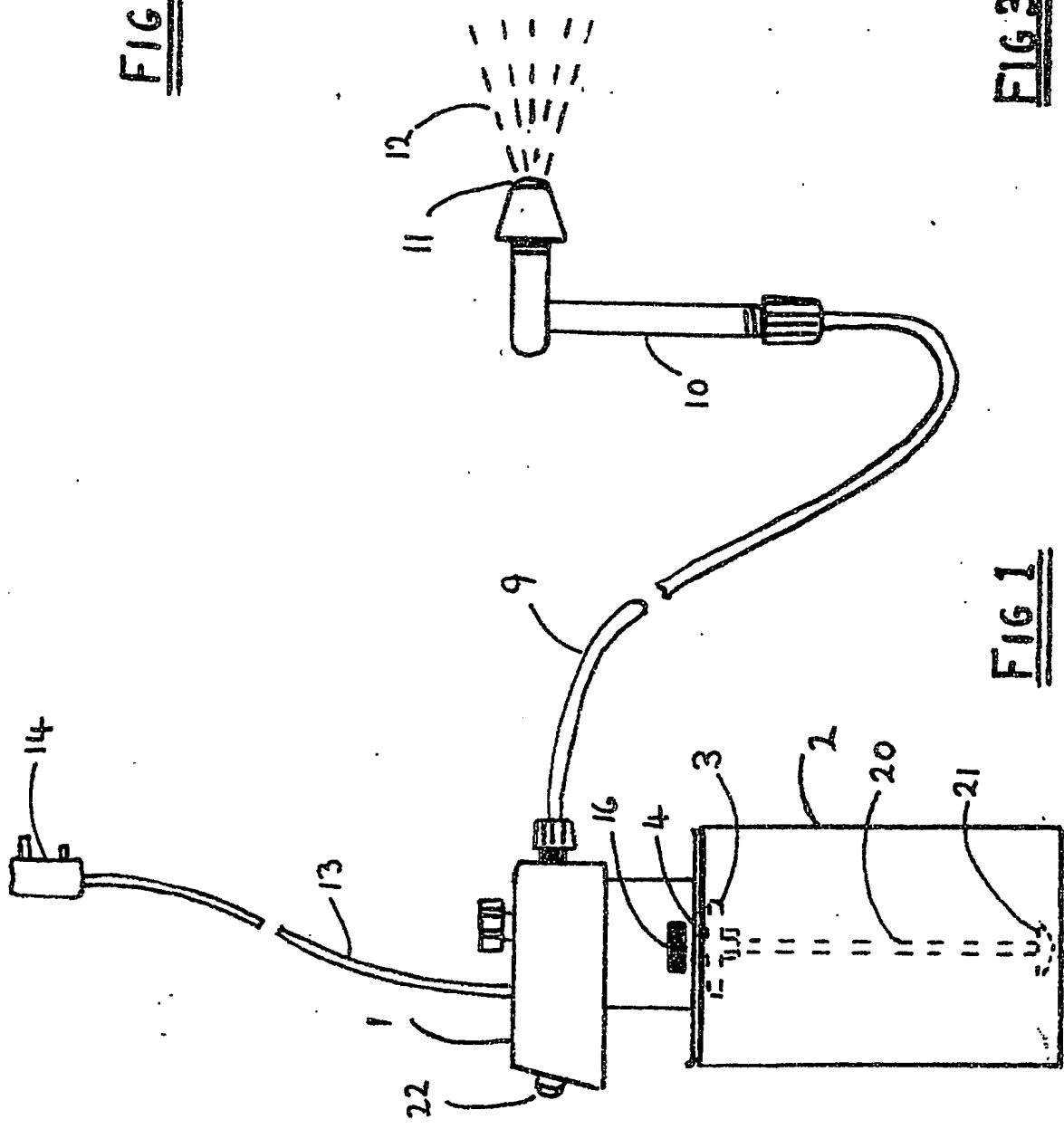


FIG 1

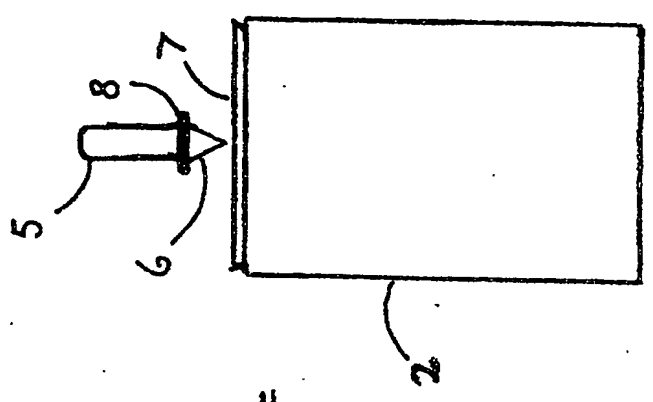


FIG 2

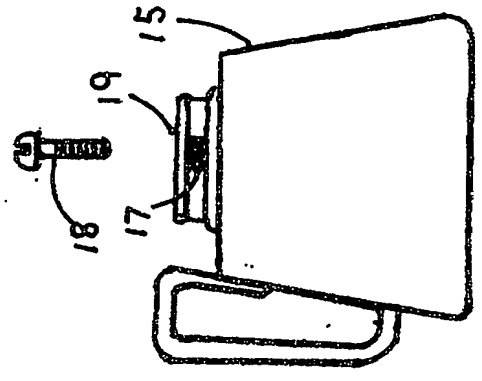


FIG 3

PCT Application

**GB0304370**

